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# *Improving*

COLLEGE AND UNIVERSITY

# *Teaching*



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## APPROACHES TO MODERN TEACHING

ORDWAY TEAD

*Former Chairman, Board of Higher Education, New York City*

## MY FAVORITE COLLEGE OR UNIVERSITY TEACHER

*Twenty-six Graduate Students*

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*California State Department of Education*

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OTHER RECENT BOOKS

*Editorial:*

SEVENTY HILLS

# Improving College and University Teaching

Featuring Articles on College Teaching  
Written by College Teachers

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## Seventy Hills

A single city to which all roads led once symbolized the world. It was built on seven hills. Except at first when the city had not yet spread beyond the Palatine, no one of the hills was ever the city; it was only a part of it. But each had its name and legend and commanded its unique view of the grandeur that was Rome.

In olden days the citadel of human knowledge also had its seven hills: the trivium and the quadrivium, the seven liberal arts. Each had its tradition, its history, its great names, its proper place in the total of knowledge, but it was only a part of a whole, a vantage point from which to view the world of knowledge.

So it is today. Percy Marks fancies the academic disciplines as hills. One teacher, he says, climbs the hill of literature, another the hill of science, or philosophy. "Each sees the same thing in the end, but each looks at it from a different side."

Yet today we no longer find anything so simple as seven liberal arts. Specialization has multiplied the fields of study until many a campus has a long list of "majors"—from accounting and anthropology to wildlife management and zoology—totaling nearer seventy than seven. Each "discipline" has arisen, not like a sudden volcanic eruption, but like a pyramid laboriously constructed by human imagination, thinking, courage, toil, and persistence. Each is a hill yielding its special view of the world and life as explored and conquered by the mind of man.

In the days of seven liberal arts, a student studied them all. He viewed "Rome" from each of its seven hills and knew it the better because of the multiple viewing; he saw Rome clearly and he saw it whole. But what of a student today in some modern metropolis of mind? He cannot climb seventy hills. Even if he had capacity and time to do so, he would be only bewildered and confused.

The most challenging problems of higher education arise from the fact that Rome now has seventy hills.

No one can see the City for the hills.

The blind men who explored only parts of an elephant got very inadequate ideas of the animal. Although not blind men, specialists necessarily are blinded men. In order to develop a specialty men must put on blinders that shut out, for the time being, every consideration but the subject of study. The result is a habit of narrow, intense viewing of a single field and a neglect of the whole. The hill which should give a view of the City becomes a tower in itself, and the city is forgotten. The specialist himself has forgotten or lost interest in the larger relationships of his specialty, and thereby his teaching loses the broader perspective.

College and university faculties increasingly feel concern for correlation and integration. Every teacher who takes his students up the hill of his choice, even only a short way, has an obligation he should not neglect or escape. As he leads them along the fascinating trail, he needs to make them aware, step by step, that they are ascending a hill that not only is worthy to be climbed but gives a view of the City as a whole.

## Fourth Year Coming

Some fine things have been said about this journal: "Comes to fill a need. Its permanence seems assured." "A constructive venture." "Interesting and informative." "Will speed along the movement to improve college teaching."

This journal closes its third year with gratitude toward all college and university people, faculty and administrators, who have shown interest and given it support; toward libraries and individuals who have subscribed, faculty people who have contributed articles, and many others who have given encouragement.

The fourth volume will begin with the February 1956 issue. The Winter issue will exhibit some improvements in format and will be packed with stimulating articles on college and university teaching and its improvement. Examples: Max S. Marshall, "Watch Out for Relatives"; Ordway Tead, "Two-Year Colleges"; A. M. Withers, "Between Periods"; Luella Cole, "Four Suggestions About Examinations"; Editorial, "Teachers as Learners."

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## Approaches to Modern Teaching

*At an opening faculty meeting at Briarcliff Junior College, Dr. Ordway Tead gave an address of which the following paragraphs were the outline. Dr. Tead, who has contributed to earlier issues of this journal, is known for his books, his magazine articles, his educational leadership, and his dynamic and inspiring speaking. Currently he is editor of economic books for Harpers.*

### By ORDWAY TEAD

¶ Most of us have at some time been college freshmen.

Can we recall our outlooks as of then, and put ourselves back into our total frame of mind?

Our efforts to do this will become more difficult with time.

I raise the question only to say that it is this freshman outlook as of 1955 with which we are confronted.

At our hazard we ignore its naïvete, its eagerness, its restricted experience along with its vigorous aspirations.

Our first thought might well be: Where was I emotionally, mentally, purposively, when I embarked on college in my freshman year?

Can I to some degree put myself imaginatively into today's freshman mind?

Quoting from *The Redfield Lectures*<sup>1</sup>:

"Education is, of course, learning something. It is also becoming something."

"Education is improvement in judgment about values."

¶ At the beginning of a new college year, we can't escape the questions:

► What have I to teach that others need to learn—and that may help others to *become*?

► Do I know how to interpose justifiably in the growth of human minds and souls whose selfhoods have to mature toward greater autonomy, greater powers of self-propulsion, and a fuller comprehension of the total world they live in?

¶ There is, also, the importance of our faith in youth. This suggests encouragement more than any belittling; the appeal to student strengths; the building of student self-assurance; the effort to discover where each student's potential *excellence* can show itself; all in a context of realistic evaluation by student and teacher of powers, aptitudes, and aspirations.

¶ If we ask what, in, through, and beyond subject-matter—what deeper dimension—with which our instruction should be indirectly infused in its orientation and presentation, the following aspects I believe are worthy of consideration: global reference, self-discovery, the discovery of the valuable, the implications of opposites, the meanings of causation, the grasp of great ideas, the meaning of the spiritual. Brief reference will be made to each of these as follows:

► The meaning of GLOBAL AWARENESS—the relation of local community loyalties and responsibilities to international awareness, interests and concerns; proper balancing of local and global focus.

► The meaning of a student's SELF-DISCOVERY AND FULFILLMENT—its relation to home, to vocation, to marriage; the problems of social conformity with which he is often urgently confronted.

► The meaning of the VALUABLE. That which we value is directive for our conduct, for man is uniquely value-seeking, value-creating, value-cherishing. Values are in the first instance *emotionally felt* as that desired and desirable; as satisfying when realized. The nonrational aspects, because primary, cannot be ignored or denied. The *reason* is additionally used to help realize value, to help us to appraise experience as good. Thus it is not possible to separate knowledge and our reflection upon it from the emotional tone or from how the student feels about some specific knowledge as, for him, inconsequential or desirable.

More than that, the questions of "is" and "ought," cannot be kept apart in the learning effort. The search for instructional "objectivity" is laudable, but evaluation, implicit or explicit, cannot be avoided. It creeps in imperiously for the student as essential to his effort toward maturing grasp, and it therefore cannot be ignored by the teacher.

College teachers treat of: (1) the social and cultural inheritance, (2) the social and cultural contemporary scene, (3) inevitable critical observations of the current scene, (4) some possible syntheses or projections of ideas as to fact and value into the future.

Appraisal, reflection, judgment concerning all of this intellectual exposure on the part of the

student are inescapably *moral* in essence; they involve value judgments. The student tacitly asks about subject matter, for example: "So what?" "Why this?" "Of what use?" "What is its relation to me?" The teacher has to have (and had better be conscious about) his own value frame of reference as well as his frame of student relevance.

- The implications of OPPOSITES, of bi-polarity and dialectic in truth seeking. Problems arise in various subjects as to: (1) the absolute and the relative, (2) freedom and authority, (3) the sacred and the secular, (4) the real and the ideal, (5) objective and subjective, etc.<sup>2</sup>

In this connection also the teacher has to keep in mind in exposition the relation of the *general* to the *particular*, of theory to practice, of hypothesis to proof or tentative conclusion.

Some teaching material proceeds from the concrete; some from the abstract.

Is the teacher aware of which approach he is employing and of the need for its supplementation on occasion by the opposite reference? Is there the necessary interweaving of fact and theory; idea with its action implications; event and meaning; concept and empirical data?

- The assumptions being employed by the teacher about THE MEANINGS OF CAUSATION, and the implications of such assumptions in exposition and in conclusions or derivatives.

Are we mindful of the problem and the confusion possible here for the student, as this has been well stated by Whitehead as follows:

A scientific realism, based on *mechanics*, is conjoined with an unwavering belief in the world of men and of the higher animals as being compound of *self-determining organisms*. This radical inconsistency at the basis of modern thought accounts for much that is half-hearted and wavering in our civilization.<sup>5</sup> [Underlining mine. O.T.]

In another volume, Whitehead offers constructively the following:

Our claim for freedom is rooted in our relationship to our contemporary environment. Nature does provide a field for independent activities. The understanding of the Universe requires that we conceive in their proper relations to each other, the various roles of efficient causation, of teleological self-creation, and of contemporary independence.<sup>8</sup>

- The inwardness and operational implications of the GREAT IDEAS of our society, as subject matter requires or may indirectly suggest reference to them. I have in mind the explication of the *meaning*, for example, of: nationalism; indi-

vidualism; conservatism; science; democracy—liberty and equality; love; reason and rationality; religion (as separate from doctrine); personality or selfhood; communication; leadership; tragedy.

Before a student graduates, should he not have some awareness of what all these and other basic ideas may mean *for him*—beyond merely verbal formulations?

- The MEANING OF THE SPIRITUAL nature of man. Is it possible to recover the word "spiritual" to some reasonably concrete and explicit connotation beyond the suggestion of a pleasant fuzz of undefined and nontransferable glow of exalted feeling?

I discussed the answer to this briefly in my Convocation speech (1955) as follows:

Have we, perhaps, tended to forget that man is a spiritual as well as a physical being? And by that I mean nothing mystical or supernatural, nothing vague or obscure. I mean that the nature of man is such that what at his best he prizes most and continues to struggle to realize are concerns of beauty, love, creativity, mercy, compassion, magnanimity, reasonableness, reverence, awareness of the Holy, the Unutterable, the All-Encompassing in the world. These are what we call the spiritual truths and values. It is because of these yearnings and strivings that we are spiritual beings.

#### Concerning Communication:

- Despite inescapable age differences between teacher and student, teaching at its best can go beyond the "universal power struggle between teacher and student" as it always has with good teachers.

But a first requirement here is the teacher's understanding acceptance of these disparities of student background, experience, current interests, and nonacademic preoccupations. The teacher is dealing at the outset with a *different mind* in terms of maturity and central concerns.

Because of this, teaching has to be a loving concern to make that which the teacher regards as important *come alive* as also important for the student because in *his* frame of reference (state of mind) the subject matter comes to be *felt* (feeling plus thought) as "his meat." His response to new ideas has desirably on occasion to be, in effect: "Here and now I am up against something really real—a page of the book of life itself. I buy this as hot stuff!"

There can and should be a *common* search

based on desires and interests, which are progressively shared as desirable because relevant, and felt as valuable because giving insight into life and living.

- Communication is basically more profound and difficult than may at first appear. "What is known in secret must be enjoyed in common and must be verified in common." Beyond this, Whitehead also said:

Expression is the one fundamental sacrament. It is the outward and visible sign of an inward and spiritual grace [i.e., something freely given. O.T.] ... in the process of forming a common expression of direct intuition, there is first a stage of primary expression...

This primary expression mainly clothes itself in the media of action and of words, but also partly of art. Their expressiveness to others arises from the fact that they are interpretable in terms of the intuitions of the recipients... with such interpretation, the recipient extends his apprehension of the ordered universe by penetrating with the inward nature of the originator of the expression. There is then a community of intuition by reason of the sacrament of expression proffered by one and received by the other.

But the expressive sign is more than interpretable. It is creative. It elicits the intuition which interprets it.<sup>4</sup>

The "sacrament of expression" with its creative and *assimilated* response from the students addressed is the achievement of real

education, of real learning. "We know not the day nor the hour" when this is being achieved, this osmosis of incorporation of novel expression into the fiber of the student's being and doing. But without this, communication has *not* occurred in any true two-way responsiveness; and learning has *not* resulted.

- The perennial prayer of the teacher thus has to be:

"Let me be helped to that power which the sharing of a sacrament should invoke—of the listening ear and the articulate utterance, which together achieve that communion of mind and spirit from which the student is ennobled while he is also informed.

"Beyond my own necessary effort to communicate the immediate data, may I have that gift of tongues which brings the healing word, which makes it true of the teacher that 'we touch him in life's throng and press, and we are whole again'."

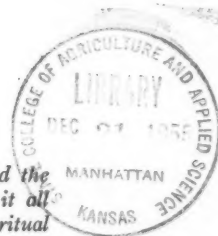
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- <sup>1</sup> Fund for Adult Education. 1955.
- <sup>2</sup> See Smith, Huston. *The Purposes of Higher Education*. New York: Harper & Brothers. 1955.
- <sup>3</sup> Whitehead, Alfred North. *Adventures of Ideas*. New York: The Macmillan Company. 1933. Page 251. Quotation by permission of publisher.
- <sup>4</sup> Whitehead, Alfred North. *Religion in the Making*. New York: The Macmillan Company. 1926. Pages 131-133. Quotation by permission of publisher.
- <sup>5</sup> Whitehead, Alfred North. *Science and the Modern World*. New York: The Macmillan Company. 1926. Page 110. Quotation by permission of publisher.

### What Does It All Mean?

*"The intellectual life justifies itself when, having embraced the common facts, it asks and answers the question, What does it all mean? There lies the true responsibility of the scholar—not to a ritual or a routine but to the reality of a subject."*

JACQUES BARZUN  
Teacher in America  
Boston: Little, Brown and Company.  
1945. Page 316.





## My Favorite College or University Teacher

Students in a graduate seminar in College and University teaching were asked: "Please write a description of the college or university teacher you rate highest from the standpoint of greatest significance to you as an undergraduate or graduate student. Do not give his or her name, but include information that is pertinent about his personality, training, scholarship, and any qualities that you wish to mention. Try to convey *why* you rate this person as you do. Do not sign your name."

As a result, twenty-six graduate students in the following paragraphs pay tribute to the memory of twenty-six teachers who tutored and inspired them. Without artistry but with much sincerity, they have tried to tell why they remember these teachers. In reading what they have written, we can enjoy a succession of dual pictures—pictures of teachers who touched the lives of students and (inescapably) pictures of the students themselves expressing appreciation.

¶ My favorite teacher was a teacher of literature who made the courses he taught come alive. He knew his subject thoroughly, enjoyed it thoroughly, and was able to communicate this enthusiasm to each of his students. He encouraged independent work and was generous in his praise of our efforts. His comments on our reports were personal; his criticism of our mistakes was just. He made each student feel important through his interest and his kindness, and he inspired us to look beyond the mechanics of writing into its meaning and its spirit.

¶ My favorite college teacher was a botany professor. He was stimulating without goading; aloof yet available; questioning yet "questionable"; demanding but reasonable; had breadth yet was able to channel interests; was interested in students' personal affairs without being prying; was convincing, clear, concise, precise, cautious, thorough; was a complete gentleman, extremely considerate of those about him; was not a lecturer, but rather a conversationalist.

¶ Kind, warm-hearted and sincere, a gentleman, a scholar in every respect, dean of the college of science, literature, and arts, but until the day he died he taught a course in second-year German "to maintain contact with the finest, most satisfying environment" he had ever known—that of teacher and student who are friends in every sense of the word.

Respected and beloved by all who knew him, he guided me and thousands like me not only through the maze of a difficult foreign language but on the road to a teaching career. His philosophy and understanding of youth of college age has, I know, been an inspiration to all who came into his classroom or office. He was a mental disciplinarian who would gently prod you one moment and give you a tremendous sense of satisfaction and well-being the next.

In any problem of ethics, morals, or character, all I need ask myself is "How would he have reacted, what would he advise?" The answer is crystal-clear and allows of no mental compromise.

¶ This teacher was a favorite for many reasons. First of all, he had a friendly attitude toward one and all. I had him when a lowly freshman. He gave us credit for the capacity of thinking things through. He was an excellent speaker and spoke with assurance. One can speak with assurance in a bigoted way; he was not guilty of this but did it in a pleasing manner. His mastery of the subject was in evidence. Although he was an expert in his field, he oftentimes allowed us to think we knew more about the subject than we did—which gave us a sense of succeeding. His friendliness was not just for the classroom but whenever you met him. He allowed free discussion without fear of ridicule but rather, as I have heard many freshmen say, "giving us credit for the brains we have."

¶ My favorite teacher during college had qualities that distinguished him from the "run of the mill" type. He had a very good grasp of his subject and always seemed well prepared. His presentation was extremely interesting and challenging. He was friendly to students, and mixed with them readily. He did not seem to play favorites or have "pets." He approached students on their level; he did not "talk down" to them nor appear patronizing. In the area of testing he was very fair. His tests were well organized and of a type that gave all students a chance to express themselves. His tests were both subjective and objective.

He was anxious to help any student who asked questions of him and always gave them something practical.

He dressed appropriately and was always neat appearing in the classroom.

¶ My favorite college teacher taught biological science and in my opinion was a master teacher. He exemplified the art of teaching. No doubt there are many characteristics that caused him to excel in teaching. The following are some of these:

- ▶ A knowledge of and enthusiasm for his subject. He emphasized relationships. He seemed to know that fragments of knowledge become meaningful when related to a larger unit.
- ▶ A desire to teach individuals rather than masses. As an example, students were assigned certain textbooks to read and then in private conference with him discuss the book.
- ▶ A firmness and high expectation of students. He praised good work, checked closely on assignments made, and tested often.
- ▶ A variation in teaching procedures. He lectured with skill and used demonstrations regularly, such as models, real specimens, diagrams, and charts.
- ▶ He had a way of stimulating most students to do their best or at least perform at a higher level than they did in other classes.

¶ Perhaps the teacher I recall best was in science. He demonstrated throughout the entire year that he was an able lecturer and also had put a lot of thought into the demonstrations. His material was up to date, and also occasionally personal. He used both comic and serious situations. The dramatic was used very effectively on a few occasions. Although in personal contact he appeared shy, his assured manner in dealing with subject matter was better emphasized by this contrast. Always thorough in his explanations and drills (blackboard problems), he showed that he was working at teaching, enjoyed and mastered his subject, and expected the same from you. He reached the students' level. One notable example of his reaching the student interest was the poem, cartoon, or humorous quip pertaining to chemistry that was appended to the end of each final examination. He also has an enviable reputation among his colleagues.

¶ I think of energy, enthusiasm, knowledge of subject. He was not particularly even tempered, but he had a genuine feeling for teaching, and a talent for acting. When reading Emerson, he was Emerson.

He had a sense of humor, kind, firm, sometimes sarcastic, but he seemed to impart a need for learning in his students. He enjoyed discussion and encouraged his students to participate.

¶ I have been acquainted with approximately 50 college teachers in past years, and without diffi-

culty narrowed the choice of the most excellent down to four individuals. Of these four, one was an instructor in mathematics, a woman teacher; one was a professor of geography; another was a chemistry professor; the fourth, an associate professor of electrical engineering.

To select the best was hard on the conscience. I have had experience with difficult decisions before, and have found great help in breaking the problem up into components for critical evaluation. Therefore, I submit a table in which I have rated the four men for nine qualities on a scale of 10 possible points each:

Field	a	b	c	d	e	f	g	h	i	Total
Mathematics	8	10	10	7	7	9	9	8	10	78
Geography	10	10	8	8	8	8	8	8	10	78
Chemistry	10	10	7	10	10	7	8	9	10	81
Electrical Engineering	8	8	7	8	8	8	9	9	10	73

- a: Knowledge of subject
- b: Imparted subject to student
- c: Approachable by student
- d: Command of class
- e: Auxiliary aids
- f: Class participation
- g: Impartial in relations
- h: Mannerisms
- i: General impression

On a point basis, the chemistry professor seemed best. At first I was reluctant to accept so arbitrary a summary. Further reflection, however, indicated the choice was well founded.

For three terms this professor conducted the General Chemistry lectures for a course I took. I always attended these lectures with great interest and anticipation. The lectures were extremely well prepared and perfectly timed with spectacular teaching aids. Although few students ever met him personally, we who heard him always were oblivious to all outside distractions. He seemed always to transmit a living subject to us.

¶ One man in my estimation stands head and shoulders above any professor I have worked under. The reasons are many and varied, some trivial or at least seemingly so. The most noteworthy is his personal interest in each and every member of his class. It appeared to me that he had studied the background of each individual before even the first meeting. He insisted on being called by his first name yet commanded the deepest respect from all class members. He is very adept at putting students at ease by showing no shadow of superiority. He never ridicules a student's honest efforts, yet answers the most minor ques-

tions. Always prepared for his lectures, he delivers them in an interesting and coherent manner. He is intellectually honest, has a sense of humor—and I could go on to great length.

To sum up, he is an excellent teacher, but he is probably my favorite because of his personal attitude.

¶ In my favorite college teacher I think of five qualities:

- ▶ Her wide and varied experience educationally and professionally: She was one of the first among women to graduate with her doctorate from a European or American university. She was recalled during her life nine times to Woods Hole, Massachusetts, to do research, and twice to Naples, Italy, to the Marine Biology laboratories.
- ▶ Her enthusiasm for her work: She retired from three different colleges or universities. When she retired from the last at over 80 years, she went to California and the last time I saw her she was working with Dr. Popenoe doing geriatrics because of the plight of "those poor older people" who needed rehabilitation. At this time she also raised tuberous begonias as a hobby.
- ▶ The trust and confidence she inspired in her students: The students loved her for her sincerity. For example, she broke her leg at 80 years old and had it in a cast, yet kept her class schedule.
- ▶ Her integrity as a person: She was always strictly honest within her own frame of reference.
- ▶ Her humanness: While an older type of authoritarian, she allowed a pleasant informal atmosphere as well as anecdotes of her earlier experiences.

¶ He is a Ph.D. in mathematics and physics, thoroughly familiar with his subject matter, yet can present the subject in such terms as are easily understood by his students. He is, in my opinion, clever—has a brilliant mind but does not make his students feel that they are dull or slow. He is very sincere in his work and in his efforts to help those to whom he lectures. In addition, he has a good sense of humor.

I rate him highly for his honesty of thought, his brilliance, and his humour, but perhaps most of all for his humility and lack of conceit which is reflected in his sympathetic understanding of the difficulties of his students. I rate him highly as an individual: the kind of person that you like to count among your friends.

¶ If I were to write all the good qualities I wish to see in a teacher, that teacher would be an imaginary one. Nevertheless, following are some of the significant and desirable points of one of my teachers on our campus:

- ▶ He is a very calm person and has an emotionally stable personality. There is never a day when he does not

make many decisions, but still he is a happy looking man.

- ▶ He takes a very deep interest in his students. By this I mean he gives lectures to the students and also listens to the personal problems of the students. I remember the one of a married student who was badly in need of money and this teacher helped him get a job.
- ▶ He is thoroughly familiar with his subject matter. He has made quite a bit of contribution to his field by doing a considerable amount of research. I agree that a good teacher is not necessarily a good researcher, but it is wonderful to be a research man and also a good teacher.
- ▶ His teaching methods are very good because they do not make things more complicated than they actually are. Though he lectures almost every period, he still leaves plenty of time for the students to think for themselves. Many times during the lecture periods he explained some basic things which other teachers would have assumed we knew. In short, he never makes us feel inferior. Moreover, he is a good lecturer.
- ▶ He derives considerable pleasure from his profession. He has served on many committees and has been the president of the national organization in our field. During his stay in the office, letters poured in from all over the country thanking him for his excellent work. He could have written books during that time, but that did not seem too important to him.

I wish to see more teachers who are well acquainted with their field, know how to teach, and have a personality which has depth in it. It is my feeling too that a teacher should have the idea that in promoting mental health among their students, teachers should promote their own as well.

¶ Helpful, quiet, unassuming, ethical, conscientious—would be some of the words I would use regarding *one* of my favorite college teachers.

I can remember the time one of his fellow professors went back on his word to his student. My college professor was indignant beyond words and yet he maintained in essence the loyalty of one teacher to another still telling the student that this fellow professor was unchristian-like in his behavior.

A former high school teacher who was noted for his excellent secondary classes, he has carried this reputation on with him in his college teaching.

He is not afraid to let his students know his shortcomings, but has often sat in other classes with his students taking notes or taking the course for credit in an effort to improve his own teaching. Many times he attended closely allied courses of another professor so as to avoid needless repetition to his own students.

His basic freshman course is taught thoroughly and deliberately to give his students as wide a



background as possible in the subject. His upper division and graduate courses are taught at the level of the student and using these students as resource material.

He has a bachelor's degree and a master's degree, and is trying the hard way to get a doctorate (teaching and studying together).

He is giving of himself. For example, he sat on my orals board at a time when he desired to see his son play one of his last games of high school basketball! He mingles with his students, often being a chaperon at dances.

¶ I once had an instructor for a course who I thought fulfilled all the requirements of an ideal instructor. His lectures were well organized with just enough questions to the class to keep us all on our toes. The questions not only showed us what we did not know but gave us confidence. There was no such thing as a wrong answer. He would start drawing you out and soon you found that you had answered the question. This, of course, resulted in the student having greater confidence in himself.

He scheduled tests and assignments for the complete term the first day of class and adhered to the schedule.

It must be admitted that the students grumbled about the course but not one blamed the instructor.

His lectures were so well organized that one could almost tell by the inflection of his voice the relative importance of various points.

¶ The college teacher I wish to discuss was my undergraduate major professor in my field at another university. My reasons for rating him as my favorite college or university teacher are as follows:

- ▶ He was democratic toward his students.
- ▶ He was well known in his field.
- ▶ He was able to create interest in his subject even for the dullest students.
- ▶ His attitude, personality, and background made a person feel that his was truly a noble profession.

Probably the most important of these to me was his ability to arouse interest. After taking my first course from him I realized which field I wanted to enter. I changed my major to his field at that time and have never been sorry for it. I will undoubtedly feel his effect on me for many years to come.

¶ I have been in college now for five years, and the teacher I am going to talk about is one I first came into contact with this year. I rate this man high because he possesses a personality which is

favorable to everyone. No matter what students he has, he treats them all the same and spends as much time with the poorer students as he does with those of higher intelligence. Some teachers do not always follow this procedure. His training and scholarship can be summed up in one word, excellent!

He possesses other qualities which are even more important. As a department head, he excels as does no other administrator I have ever seen. Never in the four months I have been here have I seen anyone refuse to do a duty he has desired they do! It is more his method of asking which inspires people, not the fact he is a superior. This superiority is never shown toward students. It is a great thing to be called a teacher, but greater it is to be called an inspirer of men to do work.

¶ The college teacher that I hold in high regard is a man who by his distinctive individual qualities and by his educational attributes is a stimulating personality.

Here are the individual qualities that make this person such an outstanding teacher. Within the classroom and outside of the classroom he is pleasant to talk with. His very manner indicates that he is interested in me as a student and as a friend. He is willing to give generously of his time so that I might comprehend the subject to a greater degree. And he has a fine sense of humor that he brings into play, usually to illustrate a point. In addition to these personal qualities he is neat in appearance.

Many educational attributes make this teacher such a stimulating and enthusiastic person. He has spent years in studying the material within his field, and he knows his subject thoroughly. He is "alive" with personal interest in his subject matter, and he thereby creates a stimulating effect on my being. He strives to relate the facts and the ideas that he deals with to my everyday living. If he does not know the answer to a particular question, he exhibits an intellectual honesty that gives me an even greater admiration for him. He realizes that he does not know everything about everything. In the matter of grading tests and papers, he is always found to be as fair as can be. Another of his outstanding attributes is that he speaks in a distinct and pleasant manner.

¶ The greatest significance to me is that my favorite college teacher has been both an inspiration and a guide. Whenever I have taken one of his courses, I have been inspired to do my best work. The enthusiasm of the teacher passes over to me,

therefore I exert myself partly in an effort to please, partly in an effort to compete with the other students, and primarily to increase my knowledge concerning the subject matter. He has been my guide in that he has given me valuable information and advice concerning my personal plans for teaching. He is always available and willing to listen to any questions, and I have always found him helping me in my field of endeavor.

¶ In looking back over my college instructors I find it difficult to say which one was most outstanding. If I were forced to select one, I would choose a visiting professor from Melbourne, Australia. As I remember his class, the most vivid feature was the interesting manner in which he presented his material and the wealth of information and material he brought to us. He never varied from the lecture method of presentation, but he made the subject so interesting that the entire class sat on the edge of their chairs during the entire hour.

It is difficult to select any one characteristic which was outstanding about him. He had a sense of humor, linked with a sympathetic understanding of all races and people. He insisted on high standards of achievement which no one resented and all strived to reach. He was not necessarily democratic, as we think of democracy in the classroom, for we had no voice in the content or selecting the course objectives.

In summarizing the reasons for selecting this professor I feel the following most important: ability to make the course content interesting, a very pleasing personality, a manner of presentation that was appealing, and a keen understanding of human nature. I am sure the entire class felt they had been through an enriched experience which was of lasting value. Incidentally, the course was the history of education.

¶ On what basis does one select the college teacher whom he considers most outstanding? The one who makes the most interesting lectures, the one who has the most profound knowledge of his field, or even the professor who has the most variety and color in his classes and very definitely stimulates his students to a high level of scholastic activity—are these necessarily the only candidates for the consideration of being most outstanding? In my case they have not been.

My most outstanding college teacher delivered lectures which were neither inspired nor inspiring;

he was honest to admit to ignorance to much recent and useful information in his field. The conduct of his courses indicated that there had been neither variation nor innovation in it since the early days of his department on the campus.

All these apparent weaknesses probably contributed to the attributes which have caused other students and myself to consider him a memorable teacher. By not being able to rely on these things, perhaps, he turned to being a very human sort of person whose interest in us, his students, was so genuine that we were quick to sense it. We realized that he was not putting on any front, because we were soon to learn that he had been so interested in former students that he could recite details from the aspirations and conduct of students from ten or fifteen years back in accurate minutiae whenever one of those students should come in for a visit.

¶ The college teacher most remembered in my training is a young instructor in zoology. He influenced me to the point of changing my original academic goal and perhaps was most influential in starting me on my present course of endeavor.

His outstanding characteristic was an ability to make us feel he was "one of us." At the same time he managed to command our respect and elicit from us our best efforts. He succeeded in making his course and field most attractive and instilled in us the desire to learn the material, not just to please him or to satisfy a requirement, but for the sake of our own development.

His methods were democratic and not autocratic. He learned with us and did not simply "tell" us. While he was actively engaged in research in his field, we never felt that we as students or the materials of the course were sacrificed on the sacred altar of "research for research's sake." He kept informed not only in his own field but in related fields. He could, and would, discuss almost any topic with you and give you a feeling of the influence of a scholar and a gentleman.

His course was a rigorous one but we always knew exactly where we stood and the requirements for the course were clear cut and well understood.

The examinations were fair and served as a teaching instrument and for self-evaluation as well as an indicator for the professor.

I think he, more than anyone else, taught me to be observant of things about me and helped me appreciate relationships between seemingly unrelated things.

¶ The teacher who has influenced me most is in the chemistry department. He has a good sense of humor as well as being quite intelligent. He tends to stimulate our interests in all phases of our class work; he also ties in related fields of study. He is a teacher who believes the classroom is only a part of our education, since we may learn much from actual experience and observation.

He urges us to keep in mind the basic facts in addition to recent developments. He is a good lecturer; he speaks plainly, loud enough, and is full of vigor.

He is devoting his life to teaching, although he has worked in industry.

His greatest satisfaction seems to be derived from his former students who have done well after completing their formal education.

He always has time to answer questions which arise from classroom and laboratory work.

He outlines our work and tells the reason why we should do the work.

He discusses various theories and different methods of laboratory work, pointing out the advantages and disadvantages.

¶ The college teacher I rate highest is outstanding in respect to attitude and his method of teaching.

► He considers his students as personalities to be enlarged, never as "buckets to be filled." Enthusiastic with a deep sincerity, he reaches each person with whom he comes into contact. He has a sense of humor that is deep seated, laughing more at himself than at others. His sense of humor is not characterized by "jokes." Although deeply religious he never "flaunted" his religion, but always used it as a basis for deep understanding of personalities.

► Long before the discussion method of teaching was generally popular he used it in his classes. Utilizing the true discussion method his students often would remark: "From him I learned to think." "He challenged my thinking as no other professor ever did." We always worked not for grades but because he stimulated our sense of desire to learn more. His discussion method was unique, for he could lead a discussion on labor

relations as effectively as one in his major field. Perhaps his method comes as near my understanding of the method of Jesus' teaching as any one I ever knew.

¶ The particular gentleman that I have regarded very highly taught American history and political science. I first became acquainted with him at one of the summer sessions at this particular college.

Perhaps I like him because he helped me locate a place to stay when housing was quite difficult to get right after the second World War. I say this, because where I stayed determined the turning-point of my career and outlook of life. When he recommended me to this particular place I did not want to disappoint him.

He had outstanding speaking ability and a wonderful singing voice, too. Unfortunately, it was necessary that he retire, but many others also undoubtedly will remember him as one of the best college teachers and the "dean of men."

A closer inspection of this professor showed him to be a skilled and precise person in his field for which he had been well educated and had had practical work experience. This precision he had carried to all areas of his life, including that of teacher-student relationships. While each of us was a statistic upon which he filed data, we were individual statistics of whom he knew enough to base his interest in us.

¶ He was so close to the students in our small college that I knew and admired him a year before I was in his class. I was aware of his faults and never idealized him. But his impact was "person to person." He did a lot for me, at nineteen over shy, when he spoke in a complimentary way of my new suit. He did more when, in reading my papers, he told me I had a gift for organization. He did still more as day by day, through the contagion of his own rich knowledge and sincere enthusiasm, he fostered in me a lasting appreciation of literature and language. In his classes we were all active together, but the activity of each of us was different, according to our talents and interests. I think of him with gratitude as one who knew and loved his subject and knew and loved his students even more.

## Preparing for a Fourfold Role

*The college teacher performs a fourfold role on his campus according to a study here reported by the specialist in state college curricula of the California State Department of Education. The author holds degrees from Arizona State College and the University of Colorado and received his Ph.D. from the University of Chicago.*

By JAMES B. ENOCHS

A growing concern is evident about the preparation of college and university teachers. The sudden upsurge in college enrollments, Fall 1954, combined with predictions for an increasing "tidal wave" of students, has served to point up the sheer quantitative problem which institutions of higher education will confront in the decade ahead. While the problem of numbers is thus brought sharply into focus, it is coupled with a more continuing concern about the quality of college teachers. Numerous articles have appeared in the literature of higher education on the role of the college teacher, his inadequacies in fulfilling that role, and the shortcomings of various programs either directly intended to prepare college teachers or indirectly eventuating in the production of college teachers.

The preparation of qualified personnel has been confounded by the fact that institutions which prepare college teachers have not been too sure just what they are supposed to produce. The problem is complicated by the diversity of educational institutions in this country and by the variety of ideas, often conflicting, held by college personnel generally, from president to instructor, as to what constitutes a good teacher.

Such has been the situation in California for a number of years, as in many other states. The University of California, by definition, has a major responsibility, among the state's public institutions, for the preparation of college teachers. The California state colleges, four- and five-year institutions whose primary responsibility is the preparation of persons in various occupational areas including public school teaching, journalism, agriculture, engineering, business, and the like, have often criticized the University for not adequately fulfilling this responsibility. Such criticisms were voiced from time to time in semiannual meetings of the University-State College Committee on Coordination. In the spring of

1953, this critical discussion resulted in the formation of a subcommittee on the Preparation of College Teachers, with representatives from the University of California and the state colleges.

This article is concerned with the preparation of teachers for the role they will play in colleges of this California type. Many similar colleges exist in other states. It is likely also that what was found regarding the role of the teacher in such colleges applies in large measure to teachers in colleges and universities of more complex organization.

At their first meeting, members of the committee decided that further work depended on a clear definition of the job to be done. In other words, both groups of institutions needed to know more exactly and more nearly the nature of the college teacher: what are the qualities for which the state colleges are searching in their teaching staff? The author of this article was assigned the task of securing such a definition from the colleges.

As a first step in his investigation the author examined the literature for statements and reports on the characteristics of college teachers.<sup>1</sup> Using the results of this examination, he then prepared a list of desirable characteristics of college teachers, preceded by a statement which reads as follows:

"Any attempt to define and list the characteristics and qualifications for teachers in the California State Colleges must be prefaced by an understanding of the functions and purposes of the colleges. Briefly, these are:

- "1. Liberal Education for all students, including general education which leads to personal development, to better understanding of self, and to socio-civic competence, plus such education as enables students to broaden and deepen their interests, to develop appreciation of democratic values and ideas, to understand their cultural heritage, and to be better aware of the forces, scientific and social, which shape the world in which they live.
- "2. Education in a variety of occupations suited to the needs and interests of the students and communities served by the colleges—teaching, business, recreation, journalism, engineering, etc.
- "3. Pre-Professional Education for those students who wish to enter such fields as medicine, dentistry, law, etc., or who wish to pursue graduate work at the professional level in a university."

<sup>1</sup> Blegen, Theodore C., and Russell M. Cooper, editors' *The Preparation of College Teachers*, Report of a Conference held at Chicago, Illinois, December 8-10, 1949, sponsored by the American Council on Education and the U. S. Office of Education; American Council on Education Studies, Series I, No. 42; Washington, D. C.: American Council on Education, 1950. See Appendix C, "Selected Bibliography," pp. 180-186.

Following this introduction, the list of characteristics was stated in terms of what the instructor does; for example:

"1.2 He identifies the needs of his students and relates the goals and objectives of his instruction to those needs.

"2.3 He recognizes the contribution of each subject field to the total pattern of liberal education.

"3.4 He is imaginative and inventive in his presentation and use of subject material."

After the list of 35 items had been compiled, directions were given to respond as follows:

"1. On the statement itself, write your reactions to both organization and content:

"1.1 Is some behavior not spelled out adequately or clearly?

"1.2 Should some of the listed characteristics be omitted?

"1.3 Should other characteristics be added?

2. In the space provided at the left of each numbered characteristic, use the following code to rate each characteristic:

V = Very Important

I = Important

U = Unimportant

"3. In the upper right-hand corner of the first page, write the name of your position, as *President, Dean, Division Chairman, Department Head, Instructor.*"

With these directions the lists were sent to the president of each of the ten colleges to be distributed as follows: one each to the president, the Executive Dean, the Dean of Instruction, and the Dean of Students; 3 copies to Chairmen of Divisions; 4 copies to Heads of Departments; and 4 copies to the instructional staff—1 professor, 1 associate professor, 1 assistant professor, and 1 instructor.

All of the replies were returned to the author for tabulation. Some of the respondents had done no more than a checking job; many others, however, had taken time not only to do a carefully annotated checking, but also to write rather lengthy reactions and suggestions both general and specific in nature. No significant difference was found between the replies of administrators and of teachers. In the final analysis it was possible to group all important behaviors under four main headings.

The first and most obvious behavior is that the college instructor teaches. Regardless of whether it is said that he teaches a subject or that he teaches students, the two elements are in the teaching situation. The students are on the campus and through the educational experiences of the subject their behavior is to be changed, it is

hoped, for the better. Presumably the instructor is with the students in order to facilitate the change. He teaches.

That he teaches a subject implies a knowledge of that subject, an expertness which enables him to present material which is meaningful to the student and his needs. His knowledge represents to the instructor his collection of jewels: he has labored long and arduously to collect them; he knows their various properties, their history and their uses; he is eager to display his jewels, to re-polish them, to show their sparkle and brilliance; furthermore, he is constantly reviewing his collection, adding new stones, discarding old ones whose value has faded. He shows how the jewels may be used in various settings, how their varying qualities may be used in a wide diversity of ways. The students of this instructor recognize his expertness and with him learn to share the joys and the excitement of his collection. While receiving thorough training in a special field, they develop understanding of the relationships between that specialty and other fields of knowledge. It is thus that the instructor teaches a subject.

At the same time, he is teaching students. While the instructor may judge that his main purpose is to teach a subject to students, he must always recognize that students are learning not only the subject but also attitudes, ideals, appreciations, and other intangibles. These are the indirect results of teaching for which the instructor is as much responsible as for the direct learning of facts and figures.

Because there are both these direct and indirect results of student-teacher contact, it is necessary that the instructor have a knowledge and understanding of students. He must know their immediate and their long-term interests and needs, both as individuals and as members of society. He must understand also the processes by which students learn, using various methods of teaching, depending upon the purposes of his course, the content to be covered, and the types of students enrolled in it. Further he must know and employ good methods of appraising both student progress and his own effectiveness in helping students to learn.

Besides being a teacher of subjects and of students, the college instructor is also a worker with students in other capacities, both in and out of the classroom. Some instructors may confine this relationship entirely within the bounds of academia—advising students on what courses to take, what



thesis subject to choose, why an examination was failed. Other instructors may sponsor clubs, counsel students on personal problems, invite them to their homes, even, on occasion, lend them money.

Such behavior implies a knowledge and understanding of students not only as learners, but also as human beings subject to all the stresses, desires, and aims of the human race. The relationship requires that the instructor behave in and out of the classroom in such ways as will encourage students toward more effective learning, both of subjects and of living.

The third behavior of the college instructor is that he participates in the affairs, the work, and the fun of the campus community. Inevitably the college instructor is a member of a group, generally having one or more supervisors as well as a host of colleagues. Just as inevitably, perhaps more so, the instructor is a committee member. He may find himself confronted with defining the goals and objectives of general education, deciding what students shall be admitted to the college and how, establishing policy with respect to the coffee break, debating the relative merits of short-answer and essay examinations, even be asked to define his own characteristics as a college teacher.

In order to be an effective participant in these and many other campus affairs, the instructor needs a knowledge and understanding of the philosophies, purposes, and aims of higher education. He shows a willingness to discuss problems with his colleagues, listening with an inquiring mind to their ideas and making his own contributions. He also understands the organizational structure of his own and other collegiate institutions so that he can work within a framework of policy and procedure to accomplish his purpose. He is aware of the problems, trends, and issues in higher education as affecting the purposes of college education, admission requirements, curriculum construction, grading standards, graduation requirements, etc. In order to make an effective contribution toward solution of these problems, he needs to know and understand the ways of working with other people in group situations as well as through individual contact.

Finally, the instructor is also a participant in the affairs, the work, and the fun outside the campus community. The nature of his teaching assignment may be such that he must make and maintain good working relationships with one or more of the businesses, agencies, groups, or individuals of the larger community. On the other

hand, his community contacts may evolve because he is the kind of person who is active in clubs, associations, and other organizations of the local community.

In addition, nearly every college instructor participates to some degree in social affairs involving other faculty members and their spouses. He is likewise a family member whose state of single or married bliss may have its own decided effect upon his being retained on the college staff, if not on his success as a teacher.

These, then, are the four general behavioral patterns of the college instructor: the teacher of a subject, the teacher of students, the participant in the professional life of the college, the participant in the professional, business, and social life of the college community. The differences between these patterns of college teaching and patterns for university teaching are for the most part only a matter of degree and emphasis. At some levels, the university will need the same kind of teachers, but finally the university will emphasize in its staff the production of that kind of research which extends the boundaries of human knowledge. The college staff may produce research of the fundamental or the applied type, but their emphasis will primarily be on teaching and working with students.

In addition, it seems likely that the college instructor will be expected to see and to teach his specialty in a broader setting—his subject as related to other subjects in a program more general than specialized in purpose. Colleges express a critical need for the subject-area teacher, as different from the subject specialist. Likewise, college instructors, more generally than university instructors, are expected to be active in on-campus and community affairs.

If these are the behaviors and emphases of college teaching, what should be the pattern of preparation? Analysis of the behavior patterns indicates the following general picture:

- ▶ Strong subject or subject-field preparation, plus a broad general-liberal education, plus related work experience if the teaching field is one which is intended to prepare students for vocational competence.
- ▶ A knowledge and understanding of college students.
- ▶ Knowledge and understanding of the techniques of teaching and development of the ability to use them effectively.

*Continued on next page.*

## Current Enrollment Trends and College Teaching

*Can quantity in enrollments and quality in teaching exist together? A psychology professor (University of Michigan) views some aspects of questions that colleges and universities must face in the years just ahead.*

By W. J. McKEACHIE

All of us have heard many times the saying, "The ideal classroom would be a student on one end of a log and Mark Hopkins on the other." Unfortunately there are not enough Mark Hopkinses to go around. In fact when I hear the statistics on prospective college enrollments for the next two decades I wonder if there are even enough logs.

What can we college teachers do with the increasing numbers of students? Is adequate education possible if recruitment of faculty and addition of classrooms lag behind enrollment? The very wording of these questions indicates an assumption that, as numbers of students increase, recruitment of qualified faculty and building of additional classroom space will lag with the result that we will have larger classes.

### VIRTUES OF LARGE CLASSES

Like most faculty members, I do not look forward with pleasure to larger classes. Nevertheless,

there is no reason to give up all hope of attaining educational objectives. Numerous comparisons of large classes and small classes have been made. The results are fairly consistently in favor of the conclusion that students learn as much in large classes as in small, at least insofar as is shown on course examinations.<sup>2</sup>

In fact, there are even some advantages to large classes. From the administrative standpoint they are economical. From the instructor's standpoint they may be highly stimulating. If the instructor has a bit of the ham actor in him, he may enjoy the prospect of having several hundred students laughing at his jokes, taking notes on his every thought, and applauding his concluding lecture. With larger classes (and a lighter teaching load, I would hope) it becomes worthwhile to spend extra time and effort in digging out a more vivid illustration and sharpening a well-turned phrase.

Unfortunately there is little research comparing methods of teaching large groups. The lecture method is undoubtedly the most widely used method, although modern instructors supplement the lecture routine by the use of films, demonstrations, role playing, and "buzz groups." Whether or not these techniques are equally as effective (or ineffective) as lecturing, is not well

### Preparing for a Fourfold Role—continued

- Knowledge and understanding of education as a social institution; awareness of problems, practices, and procedures of higher education.
- The ability to work with others toward the solution of professional and social problems.

Some of this pattern of preparation is of course already being offered. That it is not being done too effectively is evidenced from year to year in the expressed difficulties of college administrators in securing the qualified staff members which they desire. Little criticism is voiced about the quality of academic preparation in a subject specialty, but there is much criticism that persons are too narrowly trained, that they are not prepared to contribute effectively to the liberal education purposes of the college undergraduate curriculum. Too often, also, instructors come to the colleges with minds closed to any other purposes or functions of higher education than those they have learned by association in a university. They

are good democratic citizens in the civic groups which they join, but they are authoritarians in the classroom. Many candidates are also seeking appointment having had no practical experience related to their teaching field.

Be these criticisms as they may, the purpose of them is not to weaken the academic preparation of the college teacher, but rather to strengthen his chances of success by broadening his preparation to include other necessary elements. Colleges are searching for teachers who can contribute effectively in the ways described in this paper. The contributions of a specific individual are many and varied, and no pattern of courses is going to insure what the product will be. As with all education, the challenge is to explore and to experiment with the pattern of preparation in a constant search to produce a better college teacher—that alert and vital individual who makes a valuable and exciting contribution to his students, his fellow teachers, the college, and its community.

known except in the case of films and television. The extensive research programs on the use of instructional films and television now demonstrate that these tools can be successfully used not only to teach facts and skills but also to change attitudes.<sup>3</sup>

In addition to these modern teaching devices we should not forget that the printed page is also a means of communicating information to large numbers of people. Much of the information the student hears in lectures could equally well be read from texts in less time and with equal gain in learning. Yet, we know little about what types of texts or readings are most effective in teaching, or even about when to use text, when lecture, when films, or when discussion.

#### VIRTUES OF SMALL CLASSES

There are undoubted disadvantages to large classes. In the first place, both students and faculty generally prefer small classes. For many professors one of the satisfactions of teaching is personal contact with students. Such personal contact may be important in stimulating students to identify with the professor and continue in his field of scholarship.

Secondly, recent research on students' thought processes in classes indicates that students in discussion classes do more active thinking than do those in lecture classes. Hence class sizes which make discussion difficult may reduce active thinking.<sup>1</sup>

Is there anything we can do to preserve the educational values of small classes in the face of large enrollments? I believe there is. In addition to developing better techniques for teaching large groups, we may be able to use various administrative devices to conserve our minimal resources for the most good. For example, one of the natural methods of handling increased course enrollments is simply to increase class size from 20 students to 30, then from 30 to 50, and then to form two sections of 50 students each. Is there a significant difference in teaching methods used and in teaching effectiveness between classes of fifty and classes of a hundred students? I am inclined to doubt it.

This does not mean that I am an apologist for large classes. I would argue, however, that in cases where sections of a class must be large, teaching time can be utilized more effectively by combining sections into one large group for one

or more hours a week, and using the teaching time thus saved to create small discussion sections for the remaining hours. For example, if a course has 150 students meeting in three groups of 50 four times a week, one might teach all 150 in a single group two hours a week and meet five groups of 30 for the other two class meetings. Thus one may retain some of the values of small-class instruction despite large course enrollments.

One of the values of small classes is that the teacher may individualize instruction so that the bright students are stimulated to achieve up to their potential. With large enrollments there is a danger that the better students will not be adequately stimulated. If a course is so large that it must be taught in more than one section, however, it becomes economically feasible to form one or more sections of the better students and fit the instruction to the caliber of the students. Thus one of the liabilities of large enrollments may be converted into an asset.

#### SUMMARY

Two things seem to be important as we face the tidal wave of students:

- That we retain some small-group instruction.
- That we should not lose sight of the very brightest students in our concern with teaching large numbers.

The solutions suggested are merely best guesses. While I have cited research relevant to the questions raised by large enrollments, I would be remiss if I left the impression that we know the answers to the various problems raised by large enrollments. Probably the most important outcome this article could produce would be an increased awareness of the darkness in which we grope. These suggestions are really but hypotheses. Only empirical research can bring light into the darkness!

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- <sup>3</sup> Hoban, C. F. Jr., and Van Ormer, E. B. *Instructional Film Research 1918-1950*. Port Washington, N.Y.: U.S. Navy Special Devices Center, 1951 (Tech. Rep. SDC 26-7-19).

## Two Creative Faculties

A HISTORY OF THE FACULTY OF POLITICAL SCIENCE by R. Gordon Hoxie et al. New York: Columbia University Press. 1955. x + 326 pp. \$4.50.

EDUCATION AT AMHERST: The New Program, edited by Gail Kennedy. New York: Harper & Brothers. 1955. xi + 330 pp. \$4.00.

In contrast to the frequently deplored conservatism and inertia of academic groups, it is heartening to cite the creative spirit of two faculties: the graduate faculty of political science at Columbia and the undergraduate liberal arts faculty of Amherst.

### THE HISTORY OF A FACULTY

Bliss Perry while editing the *Atlantic Monthly* at the turn of the century was a guest in a Harvard company when someone spoke of the newly published *Who's Who In America*. Dr. Perry remarked that he found it useful for its biographical information on men who had achieved national prominence. Whereupon the host, with entire seriousness, asked, "Wouldn't the Harvard Quinquennial Catalogue answer every purpose?" Dr. Perry recorded this remark after he had been a Harvard professor for a generation; *Who's Who* had gone into its eighteenth edition and the incident was only an amusing reminiscence of an outgrown provincialism.

Columbia University would hardly think of its Faculty of Political Science as a total *Who's Who* list of the nation's or the world's great in the social sciences. Yet a reader of *A History of the Faculty of Political Science* has a thrill of association with the great: Charles A. Beard, Jacques Barzun, Ruth F. Benedict, Adolf A. Berle, Jr., Nicholas Murray Butler, John Bates Clark, Henry Steele Commager, Merle Curti, Franklin Henry Giddings, Frank Johnson Goodnow, Alvin Saunders Johnson, Grayson L. Kirk, John A. Krout, Paul F. Lazarsfeld, Seth Low, Arthur Cushman McGiffert, John Bassett Moore, Reinhold Niebuhr, James Harvey Robinson, Edmund Monroe Smith—twenty names picked almost at random from the long list of former and current Columbia professors in the fields of anthropology, economics, history, mathematical statistics, public law and government, and sociology.

This handsome volume is one of nineteen de-

voted to the bicentennial history of Columbia University.

This faculty doubtless faced the same financial problems that are the lot of most professors and others in professions that fall in midscale in a table of life earnings. Yet a notable page from the record of this faculty is a fiscal one. One professor who, it is remarked, "had no inherited wealth," carried on for many years, in addition to teaching, heavy and significant scholarly activities while receiving a meager salary and no financial assistance. One, on the other hand, who in addition to being a professor was also a wealthy merchant, temporarily financed three professorships in order to get them established and gave the University a library building. One professor bequeathed \$43,500 to the University, another \$85,000, another \$200,000. Other faculty bequests included "nearly three hundred thousands," "the bulk of a two million dollar estate." A professor made gifts that he hoped would equal the total salary Columbia had paid him, thus making his years of service a labor of love. Nearly all the faculty at one time or another made substantial contributions to the on-going endowment of Columbia. "Perhaps most revealing of the spirit of the Faculty has been the financial support it has given the University."

The book is filled with the spirit of this faculty whose origin was in the dreams of two men: Samuel B. Ruggles, Columbia trustee who had long been dreaming of Columbia as a graduate university; and John W. Burgess, who while yet a teen-age Union soldier in 1863 had dreamed of an advanced school of political science. The history of this faculty is a story of struggle which at first was a birth struggle. Even the chairman of the trustees, "torn between his feelings for the College he had known over the years and a concern for Columbia's future growth," handed the gavel to an assistant chairman when the time for voting came, not wishing to participate in the decision. After hours of controversy, Ruggles, then nearly eighty, rose and delivered an unrecorded but evidently inspired speech. He showed that the university idea, far from being contrary to Columbia's tradition, reached back into pre-Revolutionary days, and that a great need and opportunity existed to build, in the greatest city of the New World, a genuine center of advanced in-

struction and research. A vote was immediately taken. The Faculty of Political Science was authorized, and Columbia was committed to the university idea.

The story is packed with distinguished names, courageous academic pioneering, and impressive contributions to the human store of knowledge. Chapters are devoted to "Trial and Transition," "Service to City and Nation," "Traditions of Liberty and Tolerance," "The End of the First Half-Century," and "A New Era of Scholarship and Service." Part II of the volume is devoted to histories of the six departmental divisions of the Faculty of Political Science.

Parallel to and underlying the brilliant chronicle of conspicuous success runs the story of the struggle to expand, to regain loss, to meet constantly developing new needs, to consolidate, co-operate, coordinate. The contributions of men of this faculty, past and present, to the world of scholarship, to the social and political advancement of the nation, and to international law and diplomacy, are well known, but the narration stirs and amazes the reader. Burgess once declared that "the finest thing which civilization has yet produced is a great American university upon a private foundation." The spirit of dedication and the record of achievement of this faculty partake largely in the spirit and record of Burgess, its founder, of whom at his death it was said: "For a half-century and more he shaped the thinking of whole armies of college and university students, of members of the Bar, of judges and of public men."

#### "THE NINETY YEAR WAR"

Amherst is a college that has resisted becoming a university. John W. Burgess left his alma mater to accept the call of Columbia in 1876 because he had "come slowly, gradually, even unwillingly, to see that Amherst was not the place for a university" such as he had in mind. The new book *Education at Amherst* presents the current situation of a college that has defended itself against what W. H. Cowley has called "the ninety year war" on the four-year college. It sees itself in relation to other types of education and remains convinced of the importance and distinctiveness of its mission as a liberal arts college.

In its century and a third of operation, Amherst has introduced daring innovations. As early as 1826 two faculty reports to the trustees of the young college proposed a plan of education in the "modern" spirit which was tried briefly and then

abandoned; it was a half-century ahead of its time.

Another "new curriculum" is being operated today at Amherst. The background, nature, and current success of the program are presented in *Education at Amherst* by the chairman of the faculty committee on long-range policy which formulated the proposals on which the curriculum is based. The committee report constitutes the first part of the book. The second part is devoted to the new curriculum interpreted in relation to the objectives of the liberal college in a changing society, the content and pattern of the educational program, admissions and scholarships, orientation and guidance, social life and activities, religious life, and problems of organization and government affecting faculty and student body. The program was adopted and put into effect with unusual rapidity. Some of the reasons for the quick action are given. The first class under the new curriculum received degrees in 1951.

The final portion of the book reviews operation during the past eight years. It appears difficult to pick out a single sample to illustrate the program. The record abounds in critical thinking and the spirit of resourcefulness. An attempt at formal evaluation is disavowed, and in fact such "Pedigese" terms as "objectives" and "evaluation" are rather deplored. The closing paragraphs on "evaluation" may seem to "educationists" prejudiced or even to partake of the foolish thinking which is specifically decried. These paragraphs are vigorous and worth reading, however, even by educationists, perhaps especially by them. The book as a whole, though preoccupied with the problems, plans, and potentialities of Amherst, is rightly judged to be of interest outside Amherst circles. Readers share in the thinking of a creative college faculty and, in frequent spots in the text, the views of undergraduates about college and life.

#### Other Recent Books

Many of the books listed below merit more detailed treatment than space here permits. A further list of recent books will appear in an early issue.

ANCIENT EDUCATION by William A. Smith. New York: Philosophical Library. 1955. xii + 309 pp. \$3.75.

Cultural and educational development in ancient Mesopotamia, Egypt, India, China, Greece, Rome, Palestine, and in nonliterate societies. "Education, itself a part of culture, has no meaning or significance apart from the total cultural setting in any given case."

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**CONCISE DICTIONARY OF AMERICAN GRAMMAR AND USAGE** by R. C. Whitford and J. R. Foster, editors. New York: Philosophical Library. 1954. viii + 168 pp. \$4.50.

Emphasis on effective new modes of expression rather than mere condemnation of the unacceptable. Excellent legible typography.

**CONCISE DICTIONARY OF AMERICAN LITERATURE** by Robert Fulton Richards, editor. New York: Philosophical Library. 1955. vii + 253 pp. \$5.00.

Material presented according to its value in the study of American literature. Quite different from the ordinary reference work. Enlivened by twenty-five delightful photographs of authors.

**CRITICAL THINKING IN READING AND WRITING** by Osmond E. Palmer and Paul B. Diederich. New York: Henry Holt and Company. x + 214 pp. \$2.50. (Heavy paper cover.)

A technique developed for the United States Armed Forces Institute and later at the University of Chicago. Most test items are harder than students have ever been asked before and aim to make them use their brains. Pretest (35¢) and Post-Test (35¢) accompany the main manual.

**CRUCIAL ISSUES IN EDUCATION** by Henry Ehlers, editor. New York: Henry Holt and Company. 1955. x + 277 pp. \$2.25. (Heavy paper cover.)

Anthology of memorable statements on Freedom for Teachers, for Learners, Religion and Public Education, Racial Segregation in Education, Classroom Methods and Materials.

**EVALUATING STUDENT THEMES** by Ednah Shepard Thomas. Madison, Wisconsin: University of Wisconsin Press. 1955. vii + 39 pp. 75¢. (Heavy paper cover.)

Discussion of problems and techniques of evaluating student themes. Fourteen actual themes, each appraised. "The teacher must recognize strength as well as weakness; no student should be left without hope or without challenge."

**EXPERIMENTAL PSYCHOLOGY** by A. J. Watson et al. New York: Philosophical Library. 1955. xi + 66 pp. \$2.75.

Six samples of contemporary psychology: Perception (A. J. Watson), Adult Learning and Remembering (Harry Kay), Motivation (T. A. Deutsch), Psycho-Analysis (E. A. Farrell), Social Behavior (Michael Argyle), Prospects of Experimental Psychology (R. C. Oldfield).

**GATEWAY TO THE SOCIAL SCIENCES** by Arthur Thompson. New York: Henry Holt and Company. 1955. viii + 374 pp. (Heavy paper cover.)

Readings from fifty-six social scientists in anthropology, economics, sociology, government, institutions, history. "Selections which go to the very heart of an issue, a movement, a concept."

**INDUSTRIAL TECHNIQUES IN THE SCHOOL SHOP** by Irwin Sexton. Milwaukee: The Bruce Publishing Company. 1955. vi + 74 pp. 96¢. (Heavy paper cover.)

Industrial techniques in the school shop, project outlines, keeping abreast of industrial topics. Illustrations, bibliography, index.

**INTERGROUP EDUCATION** by Lloyd and Elaine Cook. New York: McGraw-Hill Book Com-

pany. 1954. xv + 392 pp.

Addressed to students and their teachers. Sixteen well written, practical chapters, with much concrete illustration including case studies.

**"... THE LAST BEST HOPE ...":** by Henry Wyman Holmes. Cambridge: Harvard University Press. 1955. 50 pp. \$1.50.

Another Inglis lecture, stating the new demands democracy makes on education. Abraham Lincoln said, "We shall nobly serve, or meanly lose, the last best hope of earth." Democracy makes new demands on education. "Cooperation is not enough. Mobs can co-operate."

**THE NIHILISM OF JOHN DEWEY** by Paul K. Crosser. New York: Philosophical Library. 1955. xii + 238 pp. \$3.75.

The author of this analytical volume undertakes to uncover "the utter meaninglessness of Dewey's philosophy of science, the utter emptiness of his philosophy of art and the utter sterility of his philosophy of education."

**PHYSICAL EDUCATION FOR CHILDREN** by D. Cyril Joynson. New York: Philosophical Library. 1954. 215 pp. \$4.75.

For children five to eleven: motility activities, functional activities, group work, whole class activities, expressive and creative movement, equipment. Designed especially for primary teachers and teachers in training.

**POLITICS AND SCIENCE** by William Esslinger. New York: Philosophical Library. 1955. xi + 167 pp. \$3.00.

Foreword by Albert Einstein: "Seems especially suited as a basis for the discussion of the vital question of the relation between theory and practice in politics. It contributes also to the clarification of the burning supranational problems." Three parts: Necessity and Possibility of a Practical Science of Politics; Difficulties; What Can We Do? Appendix: One Reason Why We Lost the Peace.

**PRESENT-DAY PSYCHOLOGY** edited by A. A. Roback. New York: Philosophical Library. 1955. xix + 995 pp. \$12.00.

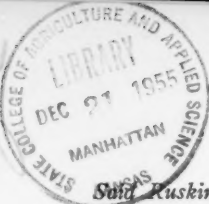
Massive symposium including forty chapters, each by an expert in his field. "Though perhaps the most comprehensive, thus far, outside of an encyclopedia, it is by no means exhaustive, and was not intended to be such." Continuity and a measure of unity are provided by the brief editorial notes that precede each chapter, placing the subject of the chapter in the larger context and giving facts about the particular author. Excellent format and typography, numerous bibliographies, twenty-three page index of names.

**THE PURPOSES OF HIGHER EDUCATION** by Hudson Smith. New York: Harper & Brothers. 1955. xix + 218 pp. \$3.50.

Foreword by Arthur Compton. Here many educational questions converge, not in agreement but in combination that makes for effectiveness: absolutism and relativism, objectivity and commitment, freedom and authority, egoism and altruism, individual and state, sacred and secular. "Patience and compromise seem to be appearing in discussions of values." "Alternatives contain elements that attract and others that repel, leaving neither alternative to be fully embraced nor totally abandoned." Aims of education are then outlined in terms of knowledge (analyzed in various categories), abilities (language, thinking, value judging, social participation), appreciations (beauty, people, difference, curiosity and awe, man's potentialities), and motivations. These aims are expressed for the liberal arts college; "actually they apply to education as a whole, as does the entire work."

**STUDENT PERSONNEL SERVICES IN HIGHER EDUCATION** by Dugald S. Arbuckle. New York: McGraw-Hill Book Company. 1953. x + 352 pp.

Twelve chapters, thirty-four appendices, and an index. Beginning with a chapter on evaluation, which sounds the keynote of the book, the text covers organization and administration of personnel ser-



## A Word for Encouragement

**Said Ruskin:** "The greatest efforts of the race have always been traceable to the love of praise." Why not, then, stimulate students to work by praising them? So asks a member of the Department of Civil Engineering at St. Martin's College. The author, who holds degrees in mechanical engineering and petroleum engineering from the University of Oklahoma, has had some years of experience in industry, served in the Armed Forces in World War II, and is in his third year in his present position.

By **MALCOLM W. McKENZIE**

As most of us know, there is a great need for engineers nowadays. This puts engineering educators in a strange position. They must try to furnish as many new engineers as possible, yet at the same time, must deflect some students away from the field. It is bound to happen that some

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vices, admissions, student orientation, vocational services, counseling, religious services, health services, housing and dining services, student aid, student group activities. Teaching is itself a student personnel service; "if learning is indicated by the changing of behavior, then teaching can be considered a process that helps the student to learn." An entire chapter devoted to teaching has much concrete suggestion on the student group, the student-centered course, the college teacher.

**SUPERVISION OF INDUSTRIAL ARTS** by William A. Bakamis. Milwaukee: The Bruce Publishing Company. 1955 xvi + 219 pp. \$3.00.

Should have value to prospective teachers of industrial arts, experienced teachers preparing for supervisory jobs, and supervisors looking for new approaches to solution of their problems. As a well organized book graphically presented, the volume merits examination by any teacher; some points might be translated over into his own situation.

**THE TEACHING OF MODERN LANGUAGES.** Studies deriving from the International Seminar organized by the Secretariat of UNESCO at Nuwara Eliya, Ceylon. United Nations Educational, Scientific, and Cultural Organization. 1955. 295 pp. \$2.50.

The humanistic aspect of language teaching, languages as key to understanding of peoples, methodology, audio-visual aids, psychological aspects, training of language teachers, textbooks, radio and television, etc. Present world situation has given increased importance to the concept of language as communication.

**WESTERN SOCIAL THOUGHT** by Ross and Kilzer. Milwaukee: The Bruce Publishing Company. 1954. x + 516 pp. \$6.50.

A tracing of the ideas that form the basis of Western civilization from the Greeks to the modern age: geography, nation, and race; early and later European sociology; sociology in the United States. "Although it is possible to understand many contemporary ideologies without tracing their lineage into the distant past, it is nonetheless true that their roots lie in antiquity." Bibliographies fill twelve pages, index of names nine pages.

students just are not fitted for the profession.

It seems to me, however, that some of those who decide to drop engineering might be retained. The field has work for a great many types of people. Good engineering executives must be better at handling people than a slide rule. Technical sales work emphasizes other traits besides a thorough knowledge of thermodynamics. Those of us who read engineering journals can readily see how writers and editors are needed. These kinds of work require a knowledge of engineering; there cannot be any question about that.

The types of people who are "naturals" for positions like these are often not exactly enthralled with spending hours over highly technical textbooks. At the same time, they might have sufficient ability to learn enough about engineering to be graduated. There are places for them, if they are needed.

How can students like these be retained in engineering? In my opinion, it is by a word of approval and encouragement now and then. I do not mean that we should wait until there is an exceptionally good report, classroom response or drawing, or other evidence of above average performance. "I'm proud of you" is music to the ears of all of us. Dignified professors may feel that it is beneath them to make such a statement. Perhaps it is, but a nod of approval, or merely saying "Good" could have the same effect. And the results can be surprising.

Surely it is not too difficult to show a bit of approval now and then. A teacher could even go to the point of telling a student that some phase of his work shows improvement, when there is none that can be seen. It probably does no harm; it is a pleasant surprise to the student, and he probably gives his teacher credit for being unusually discerning. That is not important. What is important is whether or not the student tries harder, and he often will.

This sort of treatment comes home to roost too. The teacher can suddenly realize that his students are showing more interest; they want to learn. That, in turn, gives the teacher a more satisfying feeling—having students *wanting* to learn what he is trying to teach.

There is much to be gained by an occasional verbal or written pat on the back. I suggest that it is worth a try.

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